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| 10/025,742      | 12/26/2001  | John Tiong-Heng Chuah | 53921/188           | 1636             |

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CANADA

EXAMINER

TABONE JR, JOHN J

ART UNIT PAPER NUMBER

2133

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,742

Applicant(s)

CHUAH ET AL.

Examiner

John J. Tabone, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
SHELLY CHASE  
PRIMARY EXAMINER

Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **FINAL DETAILED ACTION**

1. Claims 1-5, 7-11 and 13-20 have been examined.
2. As a result of Applicant's after final amendment of 6/24/2005, the Examiner has withdrawn the objection to the specification.

### ***Response to Amendment***

3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. However, in response to Applicant's after final amendment of 6/24/2005 this action is made final.

### ***Response to Arguments***

4. Applicant's arguments file 6/24/2005 with respect to independent claims 1, 7 and 15 have been considered but they are not persuasive.

The Applicant's arguments for independent claims states 1, 7 and 15 can be summarized as stating "There is no teaching (by Minami) of the step of inserting diagnostic cells, and recognizing and tracking the diagnostic cells". The Applicant is reminded that during patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). See MPEP § 2111. The Examiner has interpreted "the step of inserting diagnostic cells..." as the step of

inserting parity into a packet. Minami substantially teaches this in that a first parity providing unit 101h furnishes the data of the SDH/SONET format with parity (inserting a diagnostic cell into an active data stream), a first parity verifier 101i subjects the data of the SDH/SONET format to a parity check (recognizing the diagnostic cells), a counter 101j counts cells discarded by the UPC/NPC processor 101d (tracking the diagnostic cells). (Col. 6, ll. 10-14). The Authoritative Dictionary of IEEE Standards Terms, 7<sup>th</sup> edition defines parity check on page 794 as “*A summation check in which the bits in a character or block are added (modulo 2) and the sum checked against a single, previously computed parity digit; that is, a check that tests whether the number of ones is odd or even*”. In other words, furnishing the data with parity, as Minami teaches, is equivalent to “inserting a diagnostic cell into an active data stream”.

Also, the Applicant's arguments for the dependent claims seem to hinge on Minami not teaching the diagnostic cell which the Examiner has clearly pointed out above to the contrary.

It is the Examiner's conclusion that independent claims 1, 7 and 15 are not patentably distinct or non-obvious over the prior arts of record namely, Minami (US-6141326). Therefore, the rejection is maintained. Based on their dependency on claims 1, 7 and 15, claims 2-5, 8-11 and 16-20 respectively, stand rejected.

5. Applicant's argument concerning the provisional double patenting rejection of claims 1-5, 7-12 and 13-20 has not persuaded the Examiner. The MPEP 822.01 states that if the provisional double patenting rejection is the only remaining rejection the

rejection should be withdrawn. However, it is not the only remaining rejection due to the new final rejection. Therefore, rejection is maintained.

### ***Double Patenting***

6. Claims 1-5, 7-11 and 13-20 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-5 and 10-15 of copending Application No. 10/025,741. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter in the conflicting claims cited above.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

In addition, 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5,7-11 and 13-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Minami (US-6141326).

Claim 1 and 15:

Minami teaches of OC3C interface units 101 (uplink), 105 (downlink) has, a fault monitoring section 101c. Minami further discloses the fault monitoring section 101c (diagnostic cell) has (1) a cell error counter 101n (diagnostic cell counter module) counts up an error count En whenever notification of error detection is given by the first and second parity verifiers 101i, 101m, and (2) a passing cell counter 101p (diagnostic cell counter module) counts cells, which are sent from the interface 101f, on a per-connection (VPI/VCI) basis to thereby monitor the number of passing cells. Minami also teaches an equipment fault information separating unit 101s separates and outputs equipment fault information (analyzing said diagnostic cell counter module) (equipment identification information, error count En, passing cell count Cn for every connection) sent from each unit (any data path) upon being added onto intra-office cells. (Col. 5, lines 12-24; col. 6 lines 23-28, 40-41). Minami teaches a first parity providing unit 101h furnishes the data of the SDH/SONET format with parity (inserting a diagnostic cell), a

first parity verifier 101i subjects the data of the SDH/SONET format to a parity check (recognizing the diagnostic cells), a counter 101j counts cells discarded by the UPC/NPC processor 101d (tracking the diagnostic cells). (Col. 6, ll. 10-14).

Claim 7:

Minami teaches the fault monitoring section 101c has (1) a cell error counter 101n (first diagnostic cell counter module) counts up an error count En whenever notification of error detection is given by the first and second parity verifiers 101i, 101m, and (2) a passing cell counter 101p (first diagnostic cell counter module) counts cells, which are sent from the interface 101f, on a per-connection (VPI/VCI) basis to thereby monitor the number of passing cells. Minami also teaches an equipment fault information separating unit 101s (analysis module) separates and outputs equipment fault information (equipment identification information, error count En, passing cell count Cn for every connection) sent from each unit (any data path) upon being added onto intra-office cells. (Col. 5, lines 12-24; col. 6 lines 23-28, 40-41). Minami teaches a first parity providing unit 101h furnishes the data of the SDH/SONET format with parity (inserting a diagnostic cell), a first parity verifier 101i subjects the data of the SDH/SONET format to a parity check (recognizing the diagnostic cells), a counter 101j counts cells discarded by the UPC/NPC processor 101d (tracking the diagnostic cells). (Col. 6, ll. 10-14).

Claims 2, 8 and 16:

Minami teaches the processor 106 notifies the diagnostic apparatus 110 of the connection (VPI/VCI) in which the fault was detected and instructs the diagnostic

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apparatus 110 to perform a cell continuity test on the connection. Further, the processor 106 instructs the VCC setting unit of the common unit 102b to establish a path in such a manner that cells having the aforesaid connection will be looped back by the switch (hardware loop-back). Minami also teaches a cell error counter 101n (diagnostic cell counter module) counts up an error count  $E_n$  whenever notification of error detection is given by the first and second parity verifiers 101i, 101m, and a passing cell counter 101p (diagnostic cell counter module) counts cells, which are sent from the interface 101f, on a per-connection (VPI/VCI) basis to thereby monitor the number of passing cells. (Col. 6 lines 23-28, col. 10, lines 27-40).

Claims 3, 9 and 17:

Minami teaches that each of the fault messages M1, M2 includes (1) the unit that reported the low cell passing count, (2) the cause (CAUSE) of the fault, (3) whether the direction is the uplink or downlink (downstream) (UPLINK/DOWNLINK) direction, (4) the section in which the fault occurred (failure location), and (5) the connection (VPI/VCI), etc. (Col. 9, lines 1-10).

Claims 4, 10 and 18:

Minami teaches of OC3C interface units 101 (uplink), 105 (downlink) (second diagnostic cell counter) has, a fault monitoring section 105c. Minami also teaches a cell error counter 105n (second diagnostic cell counter module) counts up an error count  $E_n$  whenever notification of error detection is given by the first and second parity verifiers 101i, 101m, and a passing cell counter 101p (second diagnostic cell counter module) counts cells, which are sent from the interface 101f, on a per-connection (VPI/VCI)



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basis to thereby monitor the number of passing cells. (Col. 6 lines 23-28, col. 10, lines 27-40).

Claims 5, 11 and 19:

Minami teaches that each of the fault messages M1, M2 includes (1) the unit that reported the low cell passing count, (2) the cause (CAUSE) of the fault, (3) whether the direction is the uplink or downlink (downstream) (UPLINK/DOWNLINK) direction, (4) the section in which the fault occurred (failure location), and (5) the connection (VPI/VC1), etc. (Col. 9, lines 1-10).

Claim 13:

Minami teaches When the processor 106 concludes that a piece of equipment is suspected of being faulty, the processor instructs the active unit ACT to change over **(diagnostic cell is extracted from said data stream)**. (Col. 9, l. 64 to col. 10, l. 13).

Claim 14:

**“if a preset time has elapsed prior extraction of said diagnostic cell from said extraction location then an error condition is noted”**

Minami teaches when an interrupt is applied by a timer 106a at first time intervals t, which are comparatively short, the software 106b starts up the units 101~105 and instructs them to send error information. Minami also teaches as a result, each unit adds equipment fault information classified by uplink/downlink direction onto intra-office cells and then transmits the cells. (Col. 7, ll. 57-64).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

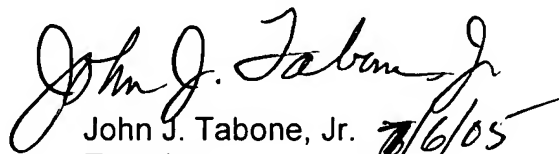
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Tabone, Jr. whose telephone number is (571) 272-3827. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John J. Tabone, Jr. 7/6/05  
Examiner  
Art Unit 2133

  
SHELLY CHASE  
PRIMARY EXAMINER